


PATENT

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Stacey Dawson

Applicant : Masaaki Ino Confirmation No. 4946
Application No. : 10/573,230
Filed : March 24, 2006
Title : SUSTAINED RELEASE PHEROMONE FORMULATION

Grp./Div. : 1616
Examiner : KARPINSKI, Luke E.

Docket No. : 57419/F349

**REQUEST FOR PRE-APPEAL BRIEF CONFERENCE
AND REVIEW OF FINAL REJECTION**

Mail Stop Appeal Brief-Patents
Commissioner for Patents
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Alexandria, VA 22313-1450

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October 8, 2010

Commissioner:

Applicant requests review of the continued rejection of claims 5-22 in the Final Office Action of July 8, 2010. No amendments are being filed with this Request which is being filed with a Notice of Appeal. The review is requested for the reasons stated below.

Interview Summary. As a preliminary matter, Applicant thanks the Examiners for taking the time to conduct a telephone interview with Applicant's representative (hereafter "Applicant") on Thursday, August 19, 2010. During the interview, Applicant discussed the differences between the claimed invention and the prior art references of Dal Moro et al. (US 4,323,556) and Kumar (U.S. 4,343,751). The Examiners stated that the recited "*consisting essentially of*" term would be read as "comprising" in the absence of support for this term in the specification.

Grounds For Review

1. The Final Rejection misapplies the references and improperly minimizes Applicant's evidence of unexpected results.

Claims 5-22 stand rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Dal Moro et al. (GB 2067406) in view of Kumar (US 4,343,751) and Rong et al. (US 6,444,742). In making this rejection, it is asserted at page 5 of the action that, although Dal Moro et al. do not teach calcination or steps thereof, this deficiency is cured by Kumar and Rong et al. Specifically, the Examiner has asserted that it would have been obvious to calcine said clays as taught by Kumar and utilize the calcination parameters of Rong et al., with the formulations of Dal Moro et al. in order to calcine said clays by known steps. This rejection is improper.

Independent claim 1 recites in relevant part, *a substrate for containing the pheromone consisting essentially of a calcined crystalline mineral*. As acknowledged in the action, Dal Moro et al. do not teach or suggest a calcining step. However, even if one combines Dal Moro et al. with Kumar, one still would not have arrived at the claimed invention. At col. 4, lines 18-20, Kumar teaches, "[t]he present agglomeration process works well for either noncalcined fines or for a combination of noncalcined and calcined fines." Furthermore, at col. 4, lines 29-34, Kumar teaches "... one-hundred percent (100%) noncalcined fines can be used in the agglomeration process; however if calcined fines are used, generally up to about thirty-five (35) parts of the calcined fines may be used with sixty-five (65) parts of noncalcined fines" (emphasis added). As such, if the skilled person considering Dal Moro et al. were to incorporate the teachings of Kumar, the resulting composition would be a non-calcined mineral--or, at most, a mixture of 65% non-calcined and 35% calcined minerals, because Kumar teaches the use of exclusively noncalcined fines or, alternatively, a mixture wherein the majority of the mixture (65 parts) should be noncalcined. The 35% calcined mixture as taught by Kumar is at odds with the presently claimed invention. Thus, Kumar fails to recognize that a substrate *consisting essentially of calcined* crystalline minerals confers an unexpected and advantageous result.

The unexpected results achieved by Applicant's invention are disclosed in the present specification, for example, at page 21, Table 2 and page 22, Table 4, wherein the pheromone survival rate is reported to be *significantly* higher when the composition is fired. Specifically, as disclosed in Table 2, Example 2 shows that 72.1% of the pheromone survives in the fired composition at 30 days, compared to 37.9% pheromone survival for the unfired composition. Therefore, the product of Kumar is not identical, or even substantially similar, in structure or composition to the composition of present claim 5, as evidenced in the side-by-side comparisons in Tables 2 and 4. A Kumar composition of 65% non-calcined fines and 35% calcined fines is not a composition that consists essentially of calcined crystalline minerals. As such, Kumar does not teach, suggest, or even contemplate the pheromone-containing benefit of using a fired crystalline mineral composition. As Rong et al. disclose firing clay nanocomposites to obtain a nanocomposite having desired mechanical properties and thermal resistance (col. 2, lines 4-6), the firing parameters of Rong et al. do not remedy the deficiencies in Dal Moro et al. Accordingly, independent claim 5, and all claims depending therefrom, including claims 6-22, are allowable over Dal Moro et al. in view of Kumar and Rong et al.

2. Applicant's use of the transition phase "consisting essentially of" is sufficient to overcome the rejections under 35 U.S.C. 103(a).

Under U.S. patent practice, it is well established that the transition phase "consisting essentially of" occupies a middle ground between the closed term "consisting of" and the fully open term "comprising." The courts have held that "the phrase 'consisting essentially of' limits the scope of a claim to the specified ingredients and those that do not *materially* affect the *basic* and *novel* characteristic(s) of a composition. By using the term 'consisting essentially of' the drafter signals the invention necessarily includes the listed ingredients that do not materially affect the basic and novel properties of the invention." See *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1354, 48 USPQ2d 1351, 1353-54 (FED. Cir. 1998); *In re Janakirma-Rao* [317 F.2d 951, 137 USPQ 893 (C.C.P.A. 1963)]; and *Ex parte Davis*, 80 U.S.P.Q. 448, 449-50, 1949 WL 3555 (Pat.Off. Bd.App.1949).

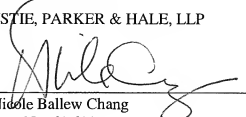
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Applicant's use of the term "consisting essentially of" effectively excludes the 65% noncalcined and 35 % calcined material disclosed in Kumar. Furthermore, support for the term "consisting essentially of" is found in Examples 1 and 2 of the originally filed specification, wherein the fired material is disclosed. The skilled person would understand that the instant "fired material" formulation consists essentially of fired minerals, and the claimed formulation therefore excludes 65% noncalcined and 35% calcined material as disclosed in Kumar. Additionally, Applicant notes that originally filed claim 1 recites, "a pheromone formulation . . . comprising a pheromone contained in a crystalline mineral fired at 500 to 700°C." As such, the originally filed application entitles Applicant to an "open" recitation of the disclosed invention including fired materials that confer an increased pheromone survival rate in a crystalline mineral. Applicant is entitled to narrow the claims during prosecution, consistent with his disclosure. As presently written (with the intermediate scope transition phrase), claim 5, and all claims depending therefrom, including claims 6-22, are distinguishable from and non-obvious over the art.

In view of the above remarks, Applicant submits that pending claims 5-22 are in condition for allowance. Applicant respectfully requests reconsideration and a timely indication of allowance. If there are any remaining issues that can be addressed by telephone, Applicant invites the Examiner to contact Applicant's counsel at the number indicated below.

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

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